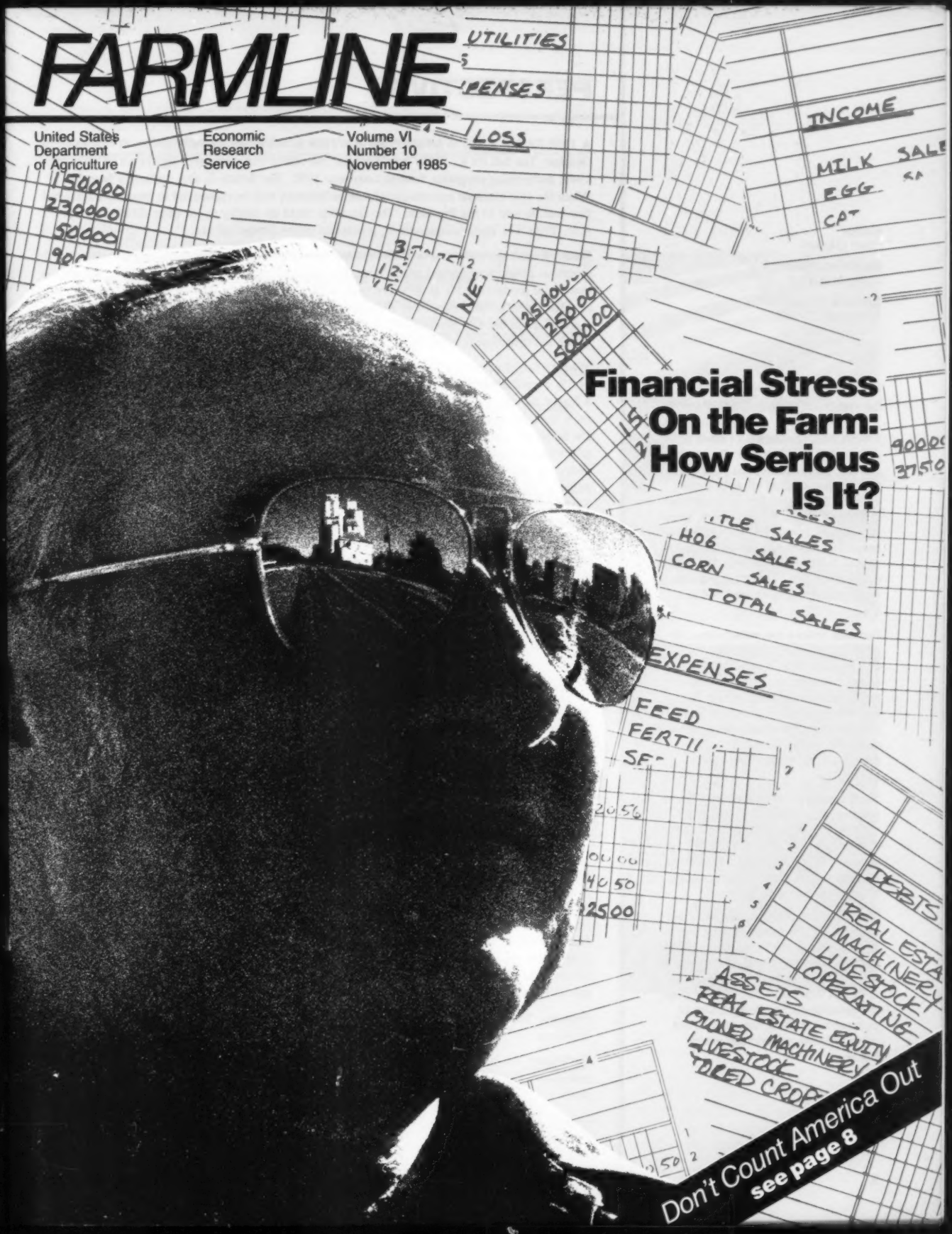
FARMLINE

United States Department of Agriculture

Economic Research Service

Volume VI
Number 10
November 1985



Financial Stress On the Farm: How Serious Is It?

Don't Count America Out
see page 8

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FARMLINE is published 11 times a year by USDA's Economic Research Service. Subscription price is $24 to U.S. addresses ($30 foreign). Order from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Ask for *FARMLINE* magazine and make your check payable to Sup't. of Documents. For faster service, call (202) 783-3238 and charge your subscription to MasterCard or Visa.

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PERSPECTIVES

A 1985 FARM BILL WAS PASSED BY THE HOUSE OF REPRESENTATIVES in early October. The bill (H.R. 2100) would amend and add to the permanent legislation of 1938 and 1949, authorizing programs through crop year 1990. The Senate is also drafting a farm bill. When the two versions are completed, the differences will be reconciled to produce a final bill that will be sent to the President. The final bill could be similar to, or quite different from, H.R. 2100. For major commodities, provisions of the House bill are:

Dairy: Price supports are tied to an adjusted cost of production index, with an assessment and diversion program to control production. The diversion program would pay farmers $10 per cwt to cut production 5% to 30% per year. Milk producers would be assessed to cover the cost of government surplus purchases and diversion payments. The bill requires the Secretary of Agriculture to increase government purchases of beef by 250 million pounds for any year in which the diversion program is in effect. Also included is a whole-herd buyout program.

Wheat: Target prices are frozen at $4.38 through 1987, and then may be reduced a maximum of 5% if production costs decline by 5%. Loan rates (now at $3.30) are set at 75% to 85% of a 5-year moving average price, excluding both high and low years, but can be reduced no more than 5% from the previous year. Loans may be recourse or nonrecourse. If nonrecourse, the Secretary has the right, under certain circumstances, to invoke the Findley Amendment, which could lower the loan rate an additional 20%. If recourse loans are announced, the Secretary has the option to implement a market loan feature whereby a producer can repay a loan either at the average market price in his county or at the loan rate, whichever is lower. For the 1986 crop year, the acreage reduction program is set at 30% of base wheat acreage for spring wheat and 20%, plus a 10% paid land diversion, for winter wheat. For crop year 1987 and thereafter, acreage reductions are established at not less than 20% of the base.

Feed grains: The corn target price is frozen at $3.03 through 1987, and may be adjusted thereafter based on production costs. Corn loan rates (currently $2.55) follow the same formula as for wheat. The Secretary has the option to implement the market loan feature with recourse loans or the Findley Amendment with nonrecourse loans. For the 1986 crop year, the acreage reduction program is specified at 20% of base acreage, except for feed grains planted prior to the program announcement. These would be subject to a 10% acreage reduction and 10% paid land diversion. For 1987 and after, acreage reductions are established at not less than 10%.

Rice: The target price is frozen at $11.90 per cwt through 1987, and may be adjusted thereafter based on production costs. The loan rate (now $8) is set at 85% of the most recent 3-year average of market prices, but can be reduced no more than 5% from the previous year. The Findley Amendment option may be used. To keep rice available at competitive prices to buyers and exporters, the Secretary may issue export certificates to them redeemable in commodities from the CCC and valued at the difference between the loan rate and the world price. Acreage reduction is not to exceed 25%, plus an additional discretionary 25% payment-in-kind diversion (with a separate $50,000 payment limitation).

Cotton: The target price is frozen at 81¢ per pound through 1987, and may be adjusted thereafter based on production costs. The formula for calculating the loan rate (now 57.3¢) is the same as the current one, with the 55¢ minimum loan rate eliminated (but any deficiency payments resulting from a reduction below 55¢ are not subject to the payment limitation). The Findley Amendment may be used. The Secretary is directed to issue marketing certificates to first handlers of cotton, valued at the difference between the world price and the loan rate. Certificates are redeemable for CCC stocks. This is designed to keep cotton available at competitive prices to export buyers and domestic cotton mills. The acreage reduction program is not to exceed 25% plus a discretionary 25% PIK diversion, as for rice.

Peanuts: The bill extends the current two-tiered price support program, with some minor modifications.

Soybeans: The bill extends the current price support program, adds the Findley Amendment, and allows the 1986 loan rate (currently $5.02)) to be reduced by 5%, if it is inhibiting exports.

Sugar: The bill extends the current program, with the minimum loan rate remaining at 18¢ per pound.

FARMLINE

AGRICULTURE . . . NATURAL RESOURCES . . . RURAL DEVELOPMENT
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FEATURES

Financial Stress on the Farm: How Serious Is It? *by Ellen Banker* 4

Some 214,000 American farms began this year unable to pay last year's bills. That's 12 percent of the farms that were covered in a major survey conducted by the Agriculture Department early this year. This survey pinpoints financially stressed farms by type, size, and geographic distribution.

Irrigation's Gains Slowed by a Cost-Price Squeeze *by Ben Blankenship* 7

Will those circles of irrigated cropland keep on multiplying? Perhaps, but it would probably take higher commodity prices or increased pumping efficiency.

U.S. Agriculture Still Has an Edge *by Eric Van Chantfort* 8

There's no question that the competitiveness of U.S. agricultural products in the world arena has been damaged, at least temporarily. But the underlying American advantage appears to remain intact. USDA economists examine the potential ability of American farmers to compete in world markets.

Will the Rural South's Job Boom Go Bust? *by Doug Martinez* 12

The shift of low-wage, labor-intensive manufacturing to the rural South was good news for the region when it occurred, but it may have left many southern counties vulnerable to foreign competition. In textiles and other industries, many of the import-sensitive jobs are moving overseas.

Southern Hemisphere Crops Complicate Price Forecasting *by Eric Van Chantfort* 15

If U.S. wheat and soybean prices followed "normal" seasonal patterns, prices would go up as stocks wound down prior to the new season's harvest. But normal patterns are no longer a guarantee, say USDA economists. One reason is the emergence of large, exportable supplies from the Southern Hemisphere.

Collaring Sheep, Cornering Coyotes *by Ellen Banker* 16

Sheep producers now have a new weapon in the battle against coyotes and other predators: the livestock protection collar.

DEPARTMENTS

Agricultural Roundup: Farm Count; Stuck with Stocks; Gleanings 10

Reports in the News: Focus on Food Spending; Farmland Values 17

Farmline Trends: Monthly Price Monitor; Measuring the Harvest 18

Financial Stress on the Farm: How Serious Is It?

Some 214,000 American farms began this year unable to pay last year's bills, according to a study by economists of USDA's Economic Research Service. That's the bad news.

This figure represents around 12 percent of the farms that were covered in a major survey by the Agriculture Department early this year. The brighter side is that the majority of farms—88 percent—had either a positive cash flow or were not overburdened by debt.

The *1984 Farm Costs and Returns Survey* provided detailed financial information applicable to 1.7 million of the nation's 2.3 million farms—in other words, all but the smallest farms. Economists say that this survey, considered to be the most comprehensive to date, can help pinpoint financially stressed farms by type, size, and geographic distribution.

While current financial stress is not limited to any particular class or size of farm or sector of agriculture, says economist Jim Johnson, some groups have been harder hit than others.

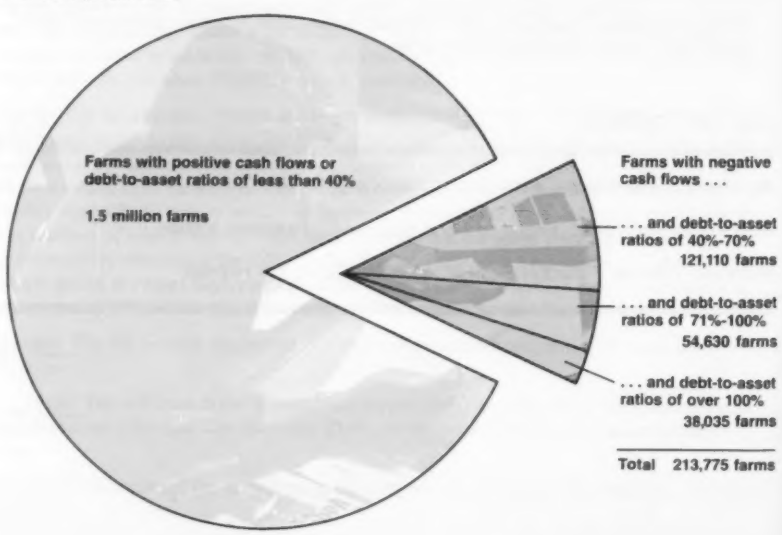
"The survey's results enabled economists to get a better grip on the number of farms affected and a clearer understanding of the types and sizes of farms experiencing financial stress," Johnson says. Among the survey's most important findings, he adds, is that, "many more commercial-size operations are in financial trouble than most analysts previously thought."

Commercial-size farms—those selling $40,000 or more a year in farm products—form the backbone of American agriculture. Although they represent only a little more than one-third of all farms, they account for 90 percent of all farm sales. "We found that at least one in five commercial operations was experiencing some degree of financial stress," Johnson says. These farms were carrying high debt loads and were unable to generate sufficient cash to pay their bills. Specifically:

- Almost 129,000 commercial farms (20 percent of all farms with annual sales of $40,000 or more) were under financial stress

What Portion of American Agriculture Is Financially Stressed?

All farms surveyed (1.7 million)


Farms with positive cash flows or debt-to-asset ratios of less than 40%
1.5 million farms
Farms with negative cash flows . . .
. . . and debt-to-asset ratios of 40%-70%
121,110 farms
. . . and debt-to-asset ratios of 71%-100%
54,630 farms
. . . and debt-to-asset ratios of over 100%
38,035 farms
Total 213,775 farms

because they had both negative cash flow and a debt-to-asset ratio of more than 40 percent.

• Another 68,000 commercial farms showed the potential for financial stress because their debt-to-asset ratios exceeded 40 percent, even though their cash flow was positive.

Perhaps even more significant, Johnson says, the results of the survey showed that midsize commercial farms (those selling between $40,000 and $99,999 a year) were more financially stressed than farms in any other sales class. Of the 214,000 financially stressed farms, Johnson says, 62,000—or 29 percent—fell into the midsize category. This is particularly telling because the number of farms in this class account for only 18 percent of the 1.7 million farms covered in the survey.

If assets are too heavily leveraged, net worth declines to dangerously low levels, giving the operator little or nothing to fall back on if cash flow is already a problem.

Farms in Trouble by Location, Sales Class, and Commodity[1]

Number of farms by location:

Number of farms by sales class:

$500,000 and over	5,444
$250,000-$499,999	14,176
$100,000-$249,999	47,216
$ 40,000–$99,999	62,004
$ 20,000–$39,999	32,379
$ 10,000–$19,999	19,776
Less than $10,000	32,780

Number of farms by commodity:

General livestock	63,705
Cash grain	58,798
Dairy	41,542
General crop	21,493
Field crop	10,925
Poultry	4,578
Fruit and tree nut	4,253
Vegetable and melon	3,612
Other livestock	3,475
Nursery	1,393

[1]Figures include farms with negative cash flows and debt-to-asset ratios of 40% and above.

Degrees of Stress

Just how heavily leveraged an operation is and what kind of cash flow it can generate are two measuring sticks that can be used to determine the financial health of a farm business.

First, survey data were used to estimate how much cash from farm and nonfarm income was available to cover production expenses, the interest and principal on outstanding debt, and family living needs. Researchers divided farms into two cash flow positions: negative and positive. A negative cash flow alone is not enough to signal severe financial stress, Johnson says, because a farm that has a strong net worth position would probably be able to weather agriculture's current economic crunch. How? By temporarily leveraging some assets. If assets are too heavily leveraged, however, net worth declines to dangerously low levels, giving the operator little or nothing to fall back on if cash flow is already a problem.

Debt-to-asset ratios—the amount owed to creditors as a percentage of the value of the operator's assets—were calculated from survey responses. Using current prices, input costs, and asset values, researchers defined four categories of debt-to-asset ratios: 0-to-39 percent, 40-to-70 percent, 71-to-100 percent, and over 100 percent.

According to Johnson, farms with ratios of 0-to-39 percent are in strong net worth positions and generally have few financial problems. It's the 40-percent mark that's the critical point, Johnson says. "That's when substantially higher rates of return to farm assets are necessary to maintain a positive cash flow, or farmers begin to have some difficulties."

Farms in the next category of 40-to-70 percent still have fairly strong net worth positions. But, unless they have a large, positive cash flow, they will probably begin having some difficulty meeting the principal repayments on loans, according to Johnson.

When debt-to-asset ratios fall into the 71-to-100 percent category, farms are likely to have trouble meeting their current interest payments as well as their principal pay-

ments. For most of these farmers, net worth is declining, Johnson says.

And when debt-to-asset ratios exceed 100 percent, he continues, the farm is considered technically insolvent. "The sale of all the farm's assets would not be sufficient to pay off its debts."

In which categories do most American farms fall?

The majority—88 percent of those covered by the survey—remained financially sound. Their debt-to-asset ratios were in the 0-to-39 percent range or they showed positive cash flow. This is encouraging news, Johnson says, in view of the varied problems facing agriculture in recent years—depressed commodity prices, dwindling farm exports, and plummeting farmland values.

These factors, however, have taken a harsh toll on some operations, he adds, pointing to the flip side of the survey's results. Three percent—or 51,000 of the 1.7 million farms—were technically insolvent.

Most of the farmers who faced some degree of financial problems fell somewhere in between.

Farmers in Between

The survey found about 196,000 farms (11.6 percent of the 1.7 million farms) with debt-to-asset ratios of 40-to-70 percent. Another 72,000 farms (4.2 percent) had debt-to-asset ratios of 71-100 percent.

Again, Johnson points out, a large debt-to-asset ratio alone does not *necessarily* mean that a farm is in financial distress. He explains: "Farms that have less than $40,000 in sales usually earn a large share of total income from nonfarm sources, and often qualify for and repay their loans on the basis of this income. Very large farms with sales of over $500,000 tend to be highly specialized and typically can carry relatively high debt-to-asset ratios because of their positive cash flow positions."

On the other hand, it's a sure sign of trouble when cash flow is low and debt levels are high, Johnson says. These are the farms researchers consider financially stressed, and this was the case for about 214,000 farms. All of these farms had negative cash flow and debt-to-asset ratios of 40 percent or more.

Certain types of farms in certain regions were most affected, Johnson says. Cash grain, general livestock, and dairy farms accounted for more than three-fourths of the 214,000 financially stressed farms. And several geographical regions were also most affected. Sixty percent of the financially stressed farms were concentrated in the Corn Belt, Lake states, and Northern Plains. A contributing factor to this concentration is the steep drop in farmland values in those regions—down more than 20 percent in 1984 alone, compared with a national decline of 12 percent. When a farmer leverages his or her land to borrow operating capital, and the land declines in value, the net worth position also drops, Johnson says. □

[Based on the results of USDA's ***1984 Farm Costs and Returns Survey.*** *Analysis was provided by economists Jim Johnson, Ken Baum, and Richard Prescott of the National Economics Division, Economic Research Service.]*

Another Look For Better or Worse

A lot of farms started 1985 with financial troubles. And this year's developments—still lower crop prices, declining exports, and further drops in farmland values—have not helped matters for many farmers. Exactly how much worse has farming's financial situation gotten during the year?

ERS analysts are going to try and find out with the *1985 Farm Costs and Returns Survey.* But they'll need the help of farmers. Here are some details on the survey:

- If your farm is chosen by USDA's random sampling procedures, you'll be contacted by an interviewer to set up a convenient time to visit your farm. Interviews will take about an hour.
- Participation is voluntary, but remember that each farm represents many other similar operations. For each farm selected, no one else can take its place.
- If you're chosen to participate, you'll receive a notification by mail in early January. Interviews will be conducted between mid-February and early March.

"The response rate to the 1984 survey was tremendous," says ERS economist Jim Johnson. "That's why the results were so revealing." But this year's survey may actually be more important to the nation's farmers and ranchers than last year's survey, according to Johnson, because with the ongoing collection of data, "we'll be able to make a comparison, to see how the problems have changed. We'll know what's getting better and what's getting worse."

The 1985 survey will be almost identical to the one farmers and ranchers answered about last year's income, receipts, expenses, debts, and assets. And, just as they were last year, answers are confidential. After questionnaire data (without names) are fed into a computer, the questionnaires are destroyed so there is no record of any individual's answers. Questionnaires are not sent on to USDA in Washington, nor are they shared with any other government agency.

Again, Johnson stresses the importance of the survey. It's the only way policymakers, farm groups, and the public can be accurately informed of how changing regulations, input costs, returns, and technology affect the agricultural economy, he says.

"The last survey provided the foundation," Johnson adds. "The next one will help us better understand the magnitude of financial problems in the farm sector."

Irrigation's Gains Slowed by a Cost-Price Squeeze

Those circles of green dotting more and more of the land in the American West illustrate what has been a pronounced trend toward irrigated cropland in recent years.

The circular fields also represent both a problem and a potential for progress. They result from the growth of crops sprinkled from a rotating boom attached at one end to a water pump. More efficient users of water than gravity-flow systems, these center-pivot systems accounted for 86 percent of all the newly irrigated land in 1974-83, according to Economic Research Service economist John Hostetler.

These systems are becoming even more efficient to cut energy use and production costs. Newer models use comparatively low water pressures (35 vs. 100 psi for conventional sprinkler systems). Although low-pressure systems have some limitations, they made up an estimated 24 percent of all center-pivot systems by 1983, Hostetler says.

Will those circles just keep on multiplying? Perhaps. But it would take higher commodity prices than this year's for analysts to make any predictions of that sort.

As a minimum, farmers' prices would have to go up faster than irrigation costs. That might be tough to accomplish anytime soon, given the current large crop surpluses and weak export demand. Moreover, the costs of pumping the water for on-farm irrigation leaped from $16 an acre in 1974 to an estimated $56 in 1983, and costs are likely to keep rising, says Hostetler. And unless the impressive recent gains in irrigation efficiency continue, irrigated acreage nationally is unlikely to expand much. It totaled 49 million acres in 1982, up from 28 million in 1950.

Increases in irrigation acreage have been tailing off recently. Nationally, acreage irrigated with on-farm pumped water burgeoned by 3.7 percent a year, on average, between 1974 and 1980. The increase for 1980-83, a period of slumping commodity prices, was only 1.4 percent a year. Only in the Delta States did the expansion accelerate, thanks to rice development in Arkansas and the trend toward double-cropping of wheat and soybeans in the South.

Will those circles just keep on multiplying?

Rising energy costs over much of the period reflected not only the higher prices of fuels to run the pumps but also the greater depths from which the water had to be lifted, among other things. The declining water tables became such a cost factor in the Southern Plains that its acreage under irrigation actually shrank by 10 percent in 1974-83, according to Hostetler.

Most Regions Show a Slowdown in Growth in Acreage Irrigated with On-Farm Pumped Water

	Average annual change	
	1974-80	1980-83
	Percent	
Northeast	1.4	1.2
Lake States	30.2	3.3
Corn Belt	26.0	2.3
Northern Plains	8.7	1.7
Appalachia	8.6	6.1
Southeast	11.7	3.6
Delta States	2.2	8.0
Southern Plains	−.9	−1.8
Mountain	1.4	.1
Pacific	1.8	1.8

The future course of irrigation acreage is obviously a national concern. It produces high per-acre yields via increasing fuel inputs. Although representing only 15 percent of our harvested cropland, sales from these farms account for nearly a third of the value of all farm products sold. Irrigation is particularly vital to western agriculture, providing the water for 98 percent of California's crops.

Yet irrigation is a touchy subject in many areas, including the Great Plains, where about 20 million acres of crops depend on pumped water. Analysts say over half the water in the huge underground Ogallala Aquifer beneath much of the Great Plains may be depleted by the year 2020. Cities as well as crops depend on that water.

Even so, if farmers' prospects in the northern Great Plains were to brighten considerably, with higher crop and livestock prices along with stable fuel costs and more efficient pump-irrigation developments, those circles of green could again proliferate substantially, Hostetler says. □

[Based on information provided by economist John Hostetler of the Natural Resource Economics Division, Economic Research Service.]

U.S. Agriculture Still Has the Edge

Amid all the reports on falling U.S. agricultural exports and declines in our market shares, trade analysts of USDA's Economic Research Service offer a bit of reassurance.

It is not the kind of news that promises immediate gratification because it speaks mostly about the potential, rather than the present ability of American farmers to compete. The economists argue that although several factors are hampering farmers in current competition for world markets, the underlying advantage of U.S. agriculture appears to remain intact.

"The United States has not become a high-cost or inefficient producer," they insist. "And thanks to major agricultural productivity gains since the early 1970's, we have not lost our fundamental comparative advantage." This advantage exists because of abundant natural resources, highly skilled farmers, advanced American technology, relatively efficient markets, and a well-developed infrastructure of support industries for agriculture.

A few definitions are needed to closely follow their analysis:

Absolute advantage is a statement about production efficiency—about who can produce a commodity at the lowest cost. Several nations, for instance, have a cost advantage over the United States in the production of sugar.

Comparative advantage, a more complicated concept, is a measure of relative efficiencies among different production sectors here and abroad. If one country can produce oil with fewer resources than it can produce cars and another country produces cars less expensively than oil, economic theory suggests that each country should specialize in the good it can produce the cheapest rather than trying to be self-sufficient in both oil and cars.

This is true, analysts say, even if one country has the ability to produce either good more cheaply than the other country. When countries concentrate their productive resources in areas of comparative advantage, overall output of all products should be greater and prices will be lower.

No Guarantee of Competitiveness

Competitiveness, however, is an altogether different story from absolute or comparative advantage, and the distinctions are important. Competitiveness, the economists explain, is a fluid condition that relates mainly to price. Even a high-cost producer can quickly become more competitive in trade by subsidizing the price of its exports. Similarly, the competitiveness of a low-cost, highly productive nation may deteriorate rapidly because of unfavorable fluctuations in currency exchange rates, because it supports its prices above market levels, or because of the aggressive trade policies of a high-cost competitor.

There is no doubt, the analysts say, that U.S. competitiveness in agricultural markets has been hurt, at least temporarily.

The encouraging news is that damage to the competitive position of the United States can probably be reversed. A sustained, favorable turn in exchange rates, a stronger recovery in the world economy, or adjustments in U.S. farm and trade policies could all help put U.S. exports back on a growth track.

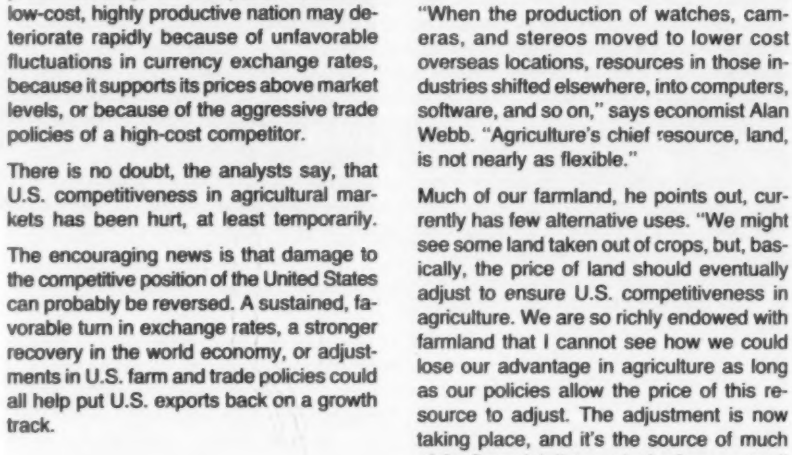
The loss of an absolute or comparative advantage in agriculture could have much deeper, longer term implications. At its worst, it might suggest that the United States would have to gradually relinquish its status as the largest exporter of farm products, retreat from world markets, and invest those resources elsewhere.

That is not what anyone expects.

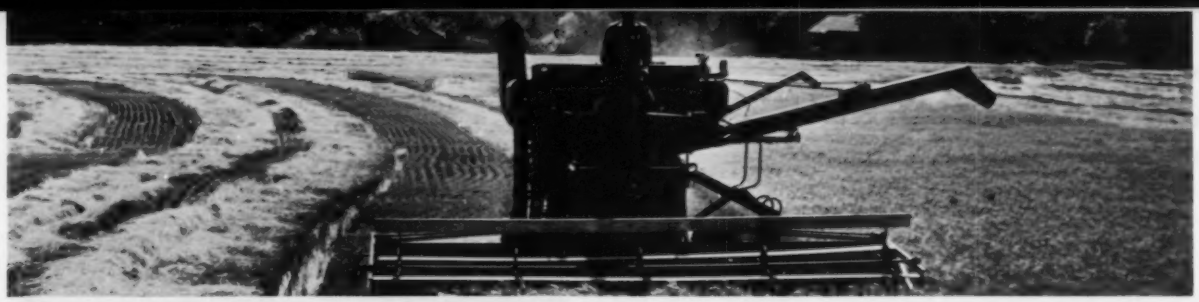
"When the production of watches, cameras, and stereos moved to lower cost overseas locations, resources in those industries shifted elsewhere, into computers, software, and so on," says economist Alan Webb. "Agriculture's chief resource, land, is not nearly as flexible."

Much of our farmland, he points out, currently has few alternative uses. "We might see some land taken out of crops, but, basically, the price of land should eventually adjust to ensure U.S. competitiveness in agriculture. We are so richly endowed with farmland that I cannot see how we could lose our advantage in agriculture as long as our policies allow the price of this resource to adjust. The adjustment is now taking place, and it's the source of much of the financial distress in the farm sector."

U.S. Costs of Production Compare Favorably with Costs of Our Major Competitors



*Sample farm that appears to be a national average.



Case for the U.S. Advantage

One way to measure absolute advantage is to compare production costs among nations, according to the economists. They point out that this is a difficult undertaking. Even within the United States, costs of production for individual commodities range widely from region to region and farmer to farmer. In addition, there are measurement problems and conceptual issues of how to figure costs. These difficulties are multiplied enormously when trying to obtain comparable information for other nations.

Despite the problems, Economic Research Service economists were able to develop some data to compare average U.S. costs of production with those of other major exporters for 1980-82. They used variable costs, which do not include depreciation, labor, and land costs.

They found, for instance, that the U.S. Northern Plains and Saskatchewan, Canada, had virtually identical average variable production costs for wheat. Average 1980-82 costs were $1.29 per bushel in the U.S. Northern Plains and $1.28 (U.S. dollars) in Saskatchewan. Data for Australia show a national average variable wheat cost of $2.06 for 1980-82, considerably above the U.S. national average of $1.56.

"Thus," they conclude, "neither of our major wheat competitors appears to have a significant cost of production advantage."

Soybean cost comparisons yielded similar results. In the Corn Belt and Great Lakes states, average variable costs for soybeans were $1.46 per bushel in 1980-82, well below the estimated $1.84 cost for southeastern Brazil and the $1.73 cost calculated for Pergamino, Argentina's major corn and soybean growing region.

For corn, the Pergamino region had an average variable cost of 87 cents per bushel over the 1980-82 period. The average for the Corn Belt-Lake states was higher, at $1.13 per bushel, but the difference between the U.S. cost and the Argentine cost had dropped to just 8 cents by 1982.

Little is known about changes in costs abroad since 1982, except that the subsequent rise in the foreign exchange value of the dollar has probably increased U.S. costs relative to those of our major competitors. A stronger dollar has that effect even without any change in actual production costs within the United States.

Case for a Comparative Advantage

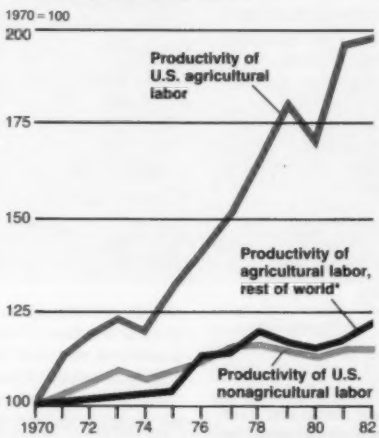
The cost of production comparisons argue that the United States has retained its status as a low-cost producer of grains and oilseeds—certainly in its primary growing regions.

Comparative advantage, rather than absolute advantage, however, may be more important in determining actual production and trade relationships.

During the 1970-82 period, it appears that U.S. agriculture widened its comparative advantage compared with other sectors of the American economy and with the rest of the world, say the economists. The productivity of inputs employed in agriculture grew faster here than abroad, while the productivity of inputs employed in other areas of the U.S. economy grew more slowly.

They cite several examples. Average productivity of U.S. farmland, for example, increased 39 percent, versus 27 percent overall in the rest of the world. The average productivity of U.S. agricultural labor rose 97 percent, compared with a 22-percent increase in other countries. The average product per unit of machinery increased here but fell in the rest of the world.

One Measure of a Strong Comparative Advantage: Rapid Productivity Growth of U.S. Agricultural Labor



*Data not available for 1971-74.

These productivity gains in agriculture outpaced those in other sectors of the U.S. economy. Compared with the 97-percent gain in agricultural labor productivity, the productivity of nonagricultural U.S. labor rose only about 15 percent. Nonagricultural labor productivity growth in Japan, Europe, and Australia was well above the U.S. rate.

None of this, of course, changes the fact that U.S. agricultural exports are severely depressed. Export earnings have tumbled from a record of $43.8 billion in fiscal 1981 to an estimated $32.0 billion in fiscal 1985. Volume has dropped more than 30 million metric tons since 1981.

But these findings may help answer another question: Has the time come for the United States to throw in the towel and admit that it no longer has an agricultural sector capable of competing in the world arena?

Not at all, say the economists.

"The adjustments presently occurring in U.S. agriculture—lower incomes, slumping land values, and losses in export market shares—are not the result of the inability of the United States to compete on a cost basis with other nations. Rather, the adjustments reflect a decline in the prices and volumes of agricultural commodity exports stemming from the appreciation of the dollar, U.S. and foreign policies, the global slowdown, and debt problems in many major importing countries." □

[Based on information provided by economists Philip Paarlberg, Alan Webb, and others. Webb is with the International Economics Division, Economic Research Service. Paarlberg, formerly with ERS, is an assistant professor of agricultural economics, Purdue University.]

AGRICULTURAL ROUNDUP

Larger Drop in Farm Numbers

The number of American farms has declined by around 44,000 units since last year, according to preliminary estimates of USDA's Statistical Reporting Service.

Diminishing numbers, however, cannot easily be tied to current economic conditions in agriculture. With only two exceptions—in 1980 and 1981—the farm count has fallen every year since the mid-1930's, when numbers peaked at 6.8 million. On the other hand, if the 1985 estimate holds, it would represent the largest 1-year drop in farm numbers in the last 10 years.

The latest figures show 2,284,630 U.S. farms as of June 1, 1985, down 2 percent from the 2,328,400 farms of 1984. Since 1980, about 148,000 farms have dropped out of the count. In the 5 prior years (from 1975 to 1980), dropouts were fewer—only about 89,000 farms.

The latest declines were widely distributed across the nation. Just five states registered increases in farm numbers between 1984 and 1985—California, Tennessee, Maryland, Arizona, and Alaska. There was no change in another nine states, leaving 36 states with fewer farms. In numerical terms, the largest declines were in Minnesota, which lost about 5,000 of its 101,000 farms, and Illinois, which lost 4,000 of its 94,000 farms.

USDA statistician Van Johnson points out that declines were proportionately greater for medium and large farms than for small farms with sales of less than $10,000 a year. These small farms now account for slightly more than 50 percent of total U.S. farm numbers, even though they hold only about 12 percent of all land in farms.

The amount of land in farms also continues to drop, although at a slower pace than the downtrend in farm numbers. The 1985 estimate of land in farms, at 1,015,583,000 acres, indicates a loss of 3,795,000 acres since 1984. Land in farms has edged downward every year since reaching a high of 1.2 billion acres in 1954, says Johnson.

As farm numbers decline, much of the land they control is absorbed by the remaining farms. As a result, average farm size is now at a record 445 acres, up from 438 acres per farm in 1984 and 427 acres per farm in 1980.

Farm Numbers Are Down, While Average Size Is Up

	Number of farms	Average size
	thousands	*acres*
1975	2,521	420
1980	2,433	427
1981	2,434	425
1982	2,401	428
1983	2,370	432
1984	2,328	438
1985	2,285	445

Source: USDA's Statistical Reporting Service.

Why the U.S. Holds the Stocks

"Countries that hold the world's grain stocks also hold the world's insurance against future expected shortages. In recent years, the United States has held most of that insurance as an often unwanted byproduct of its domestic farm policy," says economist Jerry Sharples of USDA's Economic Research Service.

"Until U.S. policy changes, the global distribution of grain inventories is likely to remain about the same," he adds.

Sharples and colleagues Alan Webb, Forrest Holland, and Philip Paarlberg point out that the United States held nearly half of world wheat carryover stocks and 80-85 percent of world coarse grain carryover stocks from 1979 to 1983. (Carryover stocks are those over and above the supplies needed to fill trade and food industry pipelines.) This pattern of U.S. stockholding, they say, illustrates a "curious interdependence" among the world's grain trading nations.

"Most other countries carry minimal stocks at no cost to their taxpayers," says Sharples. "They rely instead on the world market to absorb much of their production variability. In other words, they rely on U.S. stocks. The success of their domestic grain policies rests upon the willingness of the United States to continue to hold stocks."

Gleanings

Agriculture presents a varied picture from state to state, says economist Mary Rivers, who recently compiled state agricultural data from the 1982 Census of Agriculture and other sources. Nationally, the average age of farmers is about 48.8 years. State averages, however, range from a high of 53.2 in West Virginia to a low of 46.8 in Alaska. Alaska also has the fewest farms (570) of any state and the smallest percentage of its land area (only 3.6%) in farmland. Texas has the most farms, nearly 185,000, and Iowa holds first place in the farmland category with 91% of its land so classified. Iowa also claimed the largest share of government farm program payments in 1983—roughly $900 million of the $9.3-billion total.

. . . how big is a farm? The U.S. average is above 400 acres, but that would barely provide grazing room in spacious Wyoming, where farms average nearly 3,400 acres. At the other extreme is Rhode Island at just 86 acres per farm. Small farms, small debts. The debt of Rhode Island's farmers added up to about $28 *million* last year, compared with $18 *billion* for California farmers. Total U.S. farm debt was almost $215 billion. Finally, an interesting category—the percentage of farmers who spend more than half their worktime in nonfarm occupations. Nationwide, that applies to 45% of farmers, but 62% of Alabama's farmers spend less time at farming than they do at other work. In North Dakota, where off-farm jobs may be harder to find, only 16% of farmers report that farming is not their primary work.

There's no end yet to the American yen for fresh vegetables. Production, imports, and consumption are expected to continue rising in the second half of the 1980's, says economist Shannon Hamm of the Economic Research Service. Since 1970, combined U.S. output of fresh market lettuce, onions, tomatoes, carrots, celery, broccoli, and cauliflower has climbed 45% or more. Imports have jumped more than 500%, providing stiff competition for U.S. farmers. These figures far outpaced population growth as both domestic production and imports responded to a market fueled by rising per capita consumption.

. . . the fact is that consumers are paying higher prices to put

more fresh vegetables on the table, whether boiled, steamed, stir fried, or crisp and cold in a salad bowl. According to Hamm, broccoli and cauliflower have been two of the biggest consumption gainers. On a per capita basis, Americans have more than doubled their consumption of cauliflower and more than quadrupled their consumption of broccoli since 1970. Lettuce consumption has increased more than 3 pounds per person, while tomatoes and carrots were up about 1-1/2 pounds each. No matter that lettuce rose from an average 30 cents a pound at retail in 1970 to 92 cents in 1984; tomatoes from 42 cents to 81 cents; and carrots from 18 cents to 39 cents.

Fresh Vegetable Trends Show America Is Growing More, Importing More . . .

Selected fresh market vegetables	U.S. production		U.S. imports	
	1970	1984	1970	1984
	in millions of pounds (000,000)			
Lettuce	4,654	6,430	2	33
Onions	3,049	4,366	76	248
Tomatoes	1,823	2,795	76	824
Carrots	1,816	2,364	56	213
Celery	1,553	1,876	—	7
Broccoli	314	1,030	—	4
Cauliflower	230	658	—	12

. . . All Because Consumers Are Eating More, Paying More

	Consumption		Retail Price	
	1970	1983[1]	1970	1984
	pounds per person		*cents per pound*	
Lettuce	22.4	25.6	29.7	91.8
Onions	10.1	11.8	16.1	36.9
Tomatoes	12.2	13.7	42.0	80.7
Carrots	5.9	7.3	17.7	39.4
Celery	7.2	7.4	20.0	48.0
Broccoli	0.5	2.2	—	—
Cauliflower	0.7	1.8	—	—

[1]1984 figures are not yet available.

U.S. export strategies and price support policies are in conflict, claim several economists of the Economic Research Service. The policy choice is between support for today's producers and larger markets for tomorrow's producers. They argue that "world trade should continue to grow for the same reasons it grew in the past—more people with more income are living in countries with limited agricultural resources. Many forces outside U.S. control will help determine the rate of growth in world agricultural trade and the share captured by the United States. But the most important forces are under U.S. control."

. . . the analysts contend that "relatively high grain price supports could cause a gradual decline in the U.S. share of the world export market. That market share could be maintained or increased with lower price supports. High price supports help today's producers. Lower price supports help tomorrow's producers by expanding exports. One of the many policy challenges is to reconcile this tradeoff of gains and losses between farming generations."

Why can't the United States just use its clout as the world's largest grain exporter to manipulate grain trade in its favor? One key reason is grain's "interchangeable" nature. "There are many varieties of grain, each with its unique characteristics," say the economists. "Some are used primarily for human food and others for livestock feed, but there is substantial substitutability in global markets. Some wheat is fed to livestock. Some corn goes directly to human consumption. Technology now allows marginal substitution of different types of wheat in the production of various feedstuffs."

. . . substitution increases competition in grain trade. As a result, the United States "does not have as much power in international grain markets as its stock and production levels might indicate." For example, the United States accounts for 75% of world corn exports, but a shortage of U.S. corn in world markets would tend to be offset by supplies of barley, sorghum, or even wheat. "Policies that make U.S. grain more expensive on the world market thus run the risk of eventually reducing U.S. exports," say the analysts. They point out that U.S. grain exports are equivalent to only about 10% of grain production in the rest of the world. This means that the rest of the world would have to increase production only 5% or 6% to offset a 50% decline in U.S. exports.

According to the analysts, the United States is a good location from a global economic perspective. The grain is protected in low-cost storage facilities near well-traveled transportation routes. It is readily available, if demand rises, to the mass of world consumers who depend on imports for part of their grain supplies. However, this situation is costly to the United States and risky for the importing nations.

"There is sentiment in the United States that the U.S. government bears too much of the burden of holding grain stocks, while many importing countries feel insecure about the large concentration of stocks under U.S. control."

Given this dissatisfaction on both sides, are others ready to share the burden of stockholding? Not as far as Sharples can tell.

"As long as U.S. commodity policy continues to rely heavily on stock management to support farm sector income, other nations and private traders are unlikely to shoulder the high costs of carrying stocks," he says.

Will the Rural South's Job Boom Go Bust?

When manufacturing industries flocked to rural America to reduce their labor costs, they were welcomed with open arms. They brought new jobs and contributed to the rural economic resurgence of the 1960's and early 1970's.

But, in many instances, these industries also brought with them a troubling degree of dependency, say some analysts. The dependence on labor-intensive production processes and low labor costs makes jobs in a number of these industries, such as textiles, more vulnerable to competition from low-cost labor overseas.

In the current environment, many southern rural counties are finding—as counties in the Midwest and Northeast found a decade ago—that they have built their hopes on a soft, or at least shifting, foundation. According to economist Richard Nolan of USDA's Economic Research Service, this foundation is built around import-sensitive industries.

"The U.S. Department of Labor has classified 66 industries to be import-sensitive. These are industries in which foreign producers controlled at least 15 percent of total U.S. domestic sales from 1972 to 1981, or industries in which foreign manufacturers had an average annual increase in import penetration of at least one percentage point for the same years," says Nolan.

These industries employed slightly more than 2 million rural and urban workers in 1982 and provided 11 percent of all manufacturing jobs. In the period from 1975 to 1982, employment in the import-sensitive industries was virtually static, with job growth in some sectors and regions offset by job losses in others.

Regional Shifts Favored South

"From 1975 to 1982, Midwest employment in import-sensitive industries fell 18 percent (98,000 jobs), partly because of foreign competition. And more than a fourth of these jobs were lost in the nonmetro counties of the Midwest," explains Nolan. "At the same time, manufacturing employment gains were being enjoyed in rural southern counties."

Lower wage rates in these rural southern counties probably attracted manufacturers who were trying to reduce their production costs to remain competitive with foreign manufacturers.

Now it appears that the employment gains in the South may be eroding as well, affected by the same competitive pressures that earlier brought largely labor-intensive industries to their areas.

"Rural southern counties, especially, have become more dependent on industries with an uncertain future," says Nolan. "Nonmetro America has not attracted its share of high-tech industries that have a better chance of standing up to foreign competition."

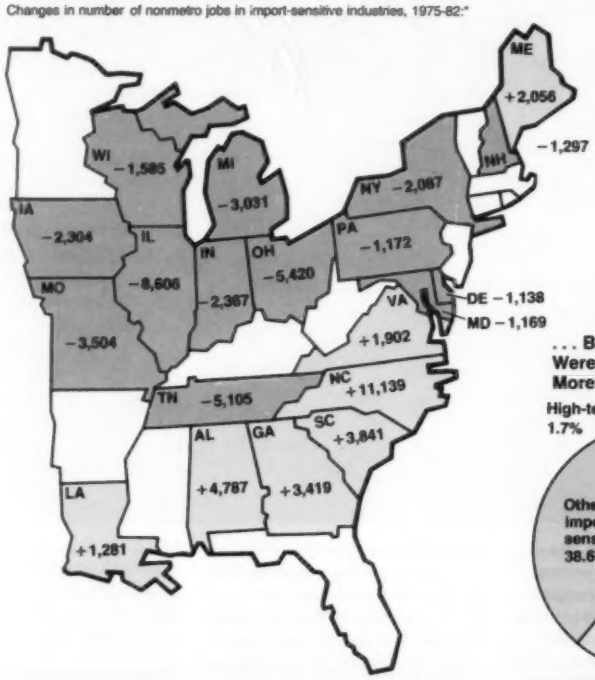
In fact, many of the industries located in rural areas are at the lower end of the skill and technology spectrum. They are mainly manufacturing products that can be stitched, molded, soldered, or assembled at a cheaper cost abroad—and particularly in the less developed world.

"Developing countries are starting to challenge the industrialized nations on a wider range of manufactured goods, putting future job growth in many rural counties at risk," says Nolan.

As many as 200 rural counties nationwide were "being stressed by foreign competition in manufacturing as early as the 1975-82 period," he contends. Nolan projects that—with a highly valued U.S. dollar overseas and the consequent rise in the prices of U.S. goods—American manufacturers and manufacturing-dependent communities have grown even more vulnerable to foreign competition since 1982.

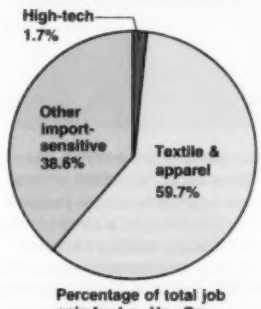
While the Midwest Lost Jobs, Six Southern States Showed Rural Job Gains in Import-Sensitive Industries

Changes in number of nonmetro jobs in import-sensitive industries, 1975-82:*

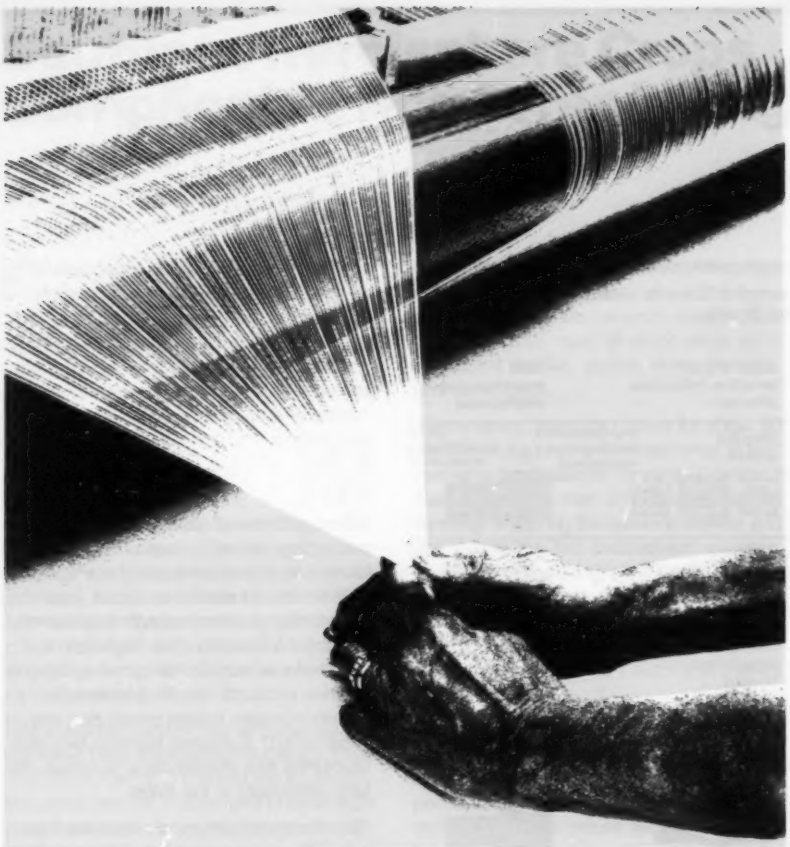


*Figures not shown for states with job gains or losses of less than 1,100, or for states west of Iowa.

. . . But the South's Gains Were Concentrated in the More Vulnerable Sectors



Percentage of total job gain for La., Va., Ga. S.C., Ala., and N.C.



Skilled hands prepare to cut and tie the yarn that has been wound onto a warp beam in preparation for weaving. With the American textile and apparel industries hard-pressed by foreign competition, there may be fewer hands doing this work in the future. *Photo courtesy of the American Textile Manufacturers Institute.*

Textile and Apparel Makers Hit

Much of the job loss that has already occurred came in the textile and apparel industries, which are vulnerable because they are labor-intensive and do not require a highly trained, highly skilled work force. These industries account for 15 of the 66 domestic industries considered to be import-sensitive.

"Developing countries have a comparative advantage in low-cost labor," says Nolan, who goes on to add that "the health of the textile and apparel industries is directly related to hundreds of thousands of U.S. jobs and to the prosperity of many local economies of the rural South."

The United States is still offering spirited competition to foreign producers in some sectors of the textile and apparel industries, however. The makers of outerwear (which includes such items as slacks, skirts, and bathing suits), for instance, showed some of the most significant job gains in rural areas. "From 1975 to 1982, this industry grew 31 percent and accounted for 9,500 new jobs in rural areas."

Cross-Section of U.S. Industry

"As a cross-section of American manufac-

Facing Foreign Competition

Many jobs moved to rural America when industries facing foreign competition either closed their factory doors permanently, or went in search of cheaper means of production within our borders. This movement has continued in recent years, with light manufacturing and certain textile and apparel industries, particularly, expanding their production in southern rural areas.

"Some of the industries that experienced employment declines in metro, as well as nonmetro areas, of the Midwest and Northeast shifted production to the rural South," says economist Richard Nolan. "Presumably, this occurred because labor costs were lower there."

A number of these troubled industries made substantial contributions to southern employment growth in the late 1970's and early 1980's. Among them were pulp mills (which provided 5,000 rural jobs), fans and electric housewares (1,700 jobs), and calculating machines (1,100 jobs).

These geographic shifts of employment in import-sensitive industries largely favored the southern states of North Carolina, Alabama, South Carolina, Georgia, Virginia, and Louisiana. North Carolina, for example, saw 11,000 new jobs created in nonmetro areas by the men's shirts, pulp mills, and outerwear garments industries.

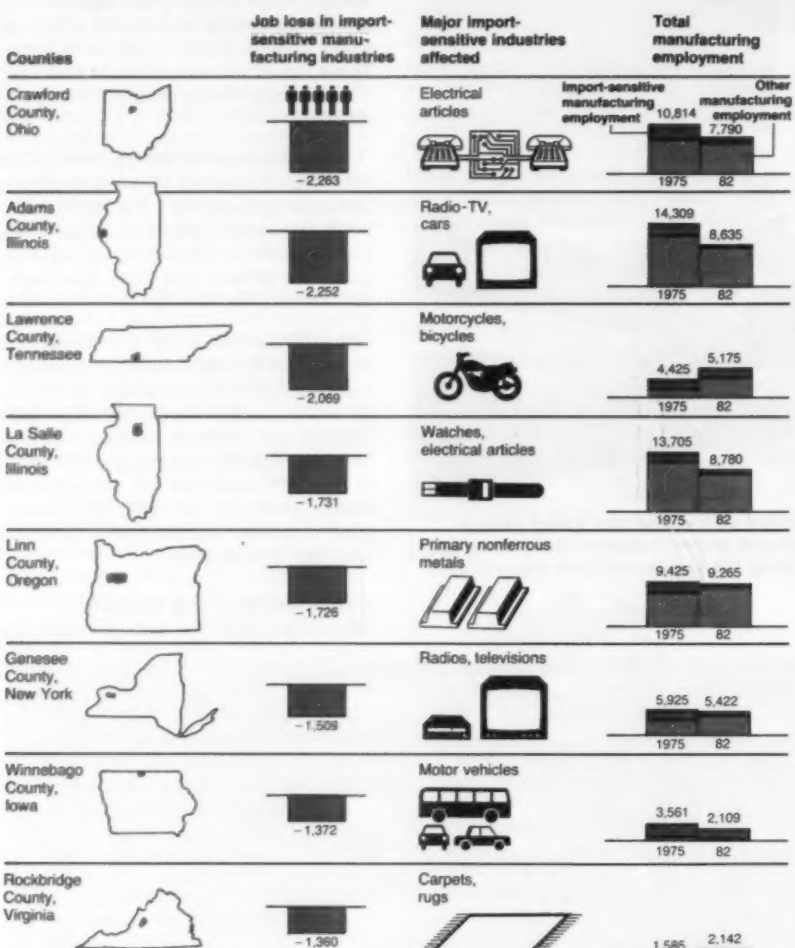
Despite these gains for specific states and counties, though, Nolan maintains there is a decided drawback to dependence on import-sensitive industries.

"Naturally, the more diversified a county's manufacturing is, the less likely foreign competition will adversely affect it," he says. "Because their economies are generally less diversified, rural counties have been more affected by foreign manufacturing competition than urban counties."

Nolan adds that "rural counties are usually dependent on one or two factories for a majority of their manufacturing jobs. A loss of one factory in a rural county can be a devastating blow to the county's economy."

He maintains that "the high U.S. dollar and the rural South's dependence on low-wage manufacturing may mean that even more southern communities will be subject to such devastating impacts."

The Ten Nonmetro Counties Showing the Largest Losses in Import-Sensitive Jobs From 1975-82 Were Mostly Outside the South



turers, these 66 industries share something in common. Foreign manufacturing has captured a large share of their domestic market or has made significant inroads in recent years," says Nolan. Included among these import-sensitive industries are durables such as cars, machine tools, radios, and televisions, and nondurables such as footwear, dresses, and earthenware (pottery and dishes).

Although high-tech industries such as those producing scientific instruments, optical lenses, and semiconductors are also considered import-sensitive, Nolan says they have better growth prospects than the other impacted industries. The high-tech industries were faced with fast-growing demand for their products resulting in domestic job growth—despite foreign penetration into the expanding U.S. market. But high-tech manufacturing has stayed close to urban centers, especially in the West.

"For the most part, rural areas have been left with what couldn't survive in metro areas," Nolan notes.

High-tech manufacturers led other import-sensitive industries in job gains from 1975 to 1982. Makers of semiconductors and related devices created 78,000 jobs, boosting their total metro employment from about 97,000 in 1975 to some 173,000 by 1982. Plants producing these items in rural areas accounted for less than 5,000 workers in 1982. And factories turning out optical instruments and lenses added another 20,000 jobs to metro employment.

The outerwear industry, which added 23,000 jobs overall, was the only one among the import-sensitive industries to increase employment by more than 5,000 in rural areas.

Of the 66 industry groups, 39 declined nationally during the 1975-82 period, and 12 of the 39 lost more than 5,000 jobs each. □

[Based largely on information provided by economist Richard Nolan of the Agriculture and Rural Economics Division, Economic Research Service.]

Southern Hemisphere Crops Complicate Price Forecasting

Forecasting U.S. exports and crop prices was never an easy task, but the exercise has become more difficult in recent years. One reason, according to USDA economists, is the emergence of large, exportable supplies of wheat, soybeans, and coarse grains south of the equator.

Brazil, Argentina, Australia, and other Southern Hemisphere nations harvest and export their crops at a time of year when U.S. supplies are being worked down and prices should be going up. Because of the growing importance of these nations in world markets, American farmers and USDA commodity analysts can no longer rely on a "normal" seasonal pattern of rising prices during the two or three quarters following the U.S. harvest.

This seasonal pattern has its basis both in economic theory and past experience, says economist Patrick O'Brien of the Economic Research Service. Prices tend to fall to their lowest point of the marketing year when farmers bring in the harvest.

As harvest supplies are used and the accumulated cost of holding stocks mounts up through the year, O'Brien explains, prices would normally rise as much as 5 to 10 percent over the following two quarters. In the final quarter of the marketing year, prices may go in either direction, depending on how the market sizes up prospects for the approaching harvest.

This pattern, however, no longer goes like clockwork. O'Brien and several other ERS economists, including Keith Collins and Katherine Reichelderfer, recently examined quarterly movements in U.S. farm prices from 1976/77 through 1984/85. They focused on corn, wheat, and soybeans.

Corn prices behaved pretty much as expected—mostly falling in the harvest quarter and rising in the next two quarters. Wheat and soybean prices were not so predictable.

Both commodities, in fact, showed some significant deviations from the seasonal pattern that economic theory would suggest, if foreign harvests were ignored. O'Brien calls these deviations "contraseasonal movements," and he says they are becoming increasingly frequent. They typically occur, he observes, when Brazil, Argentina, or Australia harvests a larger than expected crop, most of which ends up in the export market, pulling down the U.S. and world price.

Winter wheat, which accounts for about 80 percent of the total U.S. wheat crop, is harvested in the summer months. Economic theory suggests that wheat prices should normally fall during the summer harvest and rise during the two subsequent quarters. That's not exactly what O'Brien, Collins, and Reichelderfer found. June-September and October-December prices usually behaved as predicted, but U.S. wheat prices fell contraseasonally in 7 out of the 9 years during January-March.

For soybeans, the contraseasonal movements also came in the January-March period when prices would normally be expected to rise following the autumn harvest. Instead, soybean prices fell in 5 out of the 9 years.

O'Brien and his colleagues say these contraseasonal price movements may have partly reflected weather effects on the winter wheat crop and new information on farm program signup and planting intentions for spring-seeded crops. The market may also have been reacting to USDA reports on stocks and revised production estimates of the previous fall's harvest.

The economists claim, however, that supply developments in the Southern Hemisphere appear to be a more important factor.

"Southern Hemisphere crop prospects generally do not become clear until December or January, and harvesting and export marketing begin in many areas in January and February," O'Brien says. As a result, the market impact of Southern Hemisphere crops tends to be concentrated in the January-March quarter.

The impact can be substantial, and it can go in either direction, he adds. "Storage in many Southern Hemisphere countries is limited, and virtually all the crops not earmarked for domestic use are exported within 60 to 90 days. Consequently, fluctuations in production (which are increasingly common but difficult to accurately forecast) are translated directly into trade fluctuations. The Southern Hemisphere's shipments made up a large enough share of world supplies during this period to make or break world market prices."

The solution might seem simple: Forecasters need to give more weight to the impact and seasonal nature of the Southern Hemisphere's role in shaping commodity prices. The catch is that this isn't so easily accomplished.

"Forecasters recognize the importance of Southern Hemisphere crops in determining world and U.S. commodity prices during the January-March quarter," O'Brien says. "The problem is one of forecasting highly variable crop yields, production, and exports. Argentine, Brazilian, and even Australian crop prospects are often very uncertain right up until the harvest begins or is actually in progress." □

Contraseasonal Price Changes Are Concentrated in the January-March Quarter

	Corn prices		Wheat prices		Soybean prices	
	Rose	Fell	Rose	Fell	Rose	Fell
	Number of times prices rose and fell [1]					
January-March	9	0	2	7	4	5
April-May	7	2	4	5	7	2
June-September	4	5	3	6	4	5
October-December	2	7	8	1	2	7

[1] Data show changes from previous quarter for 1976/77-1984/85 marketing years.

Collaring Sheep, Cornering Coyotes

With livestock protection collars, the coyote still gets the sheep, but the poison gets the sheep-killing coyote. *Photos courtesy of Guy Connolly.*

Sheep producers live with the ever-present threat of predators. Coyotes, particularly, can wreak havoc in an unprotected flock. But producers now have a new way to put the leash on coyote troubles: Simply, collar the sheep.

According to economist John Lawler of USDA's Economic Research Service, predator problems can range from an occasional kill to losses of up to 20 percent of an entire flock in a single season.

Producers have used a variety of techniques to repel or eliminate coyotes, Lawler says, including fencing, noisy devices that scare coyotes (but not sheep), guard dogs, steel traps, aerial hunting, and baits that contain a poison called Compound 1080.

The collars may be new, but using 1080 as a predator control is not. Until the practice was banned in 1972, the most widely used method of poisoning predators with 1080 was to lace the carcass of a dead animal with the compound. The idea was the coyotes would feed on the poisoned carcasses rather than stalk and kill live sheep. The practice was effective, Lawler says, but with one major flaw. Other animals that were scavengers, not predators, also fed on the contaminated carcasses, and also died.

Many environmental groups protested the unintentional killing of eagles, foxes, and other wildlife. Protests were so vocal, in fact, that the Environmental Protection Agency (EPA) suspended the use of 1080 as a predator control in 1972.

The result: more protests, this time from sheep producers.

While many producers conceded that other techniques, or at least a combination of them, could effectively control some predator problems, many others argued that nothing else worked as well as 1080 baits for serious predator problems, Lawler says.

Going for the Throat

One alternative, it seemed, would be a method of using 1080 to poison the predators that attack livestock without causing the deaths of nonpredatory animals.

But, how?

Livestock protection collars may be the answer, Lawler says. The collars, which are filled with pouches that contain poison, are placed around the necks of sheep. (They can also be used on other livestock, such as goats.) Since 75-to-90 percent of the coyote attacks on sheep involve neck wounds, the idea is that the attacking coyote would puncture the collar and get a few drops of 1080, enough to put it out of the sheep-killing business.

The use of Compound 1080 in livestock protection collars was conditionally approved by the EPA in July 1985. Currently, collars can only be used in fenced pastures. States must also develop EPA-approved training and certification programs before producers can actually buckle the collars around the necks of their sheep. Wyoming will most likely be the first state to do so.

EPA's approval, Lawler says, was based largely on the results of research done by the U.S. Fish and Wildlife Service at its Denver Wildlife Research Center. Guy Connolly, a wildlife biologist, was the project leader. Pen tests at Denver, Colorado, and Logan, Utah, were followed by field tests on private ranches in Idaho, Montana, and Texas, from 1978 to April 1983.

Connolly's group tested the collar's effectiveness in killing attacking coyotes and the potential for hazards to nontarget animals.

Sacrificial Lambs

The registered concentration of 1080 in collars is 100 percent effective, according to Connolly. "In 15 pen trials, we never had a coyote bite the collar and survive."

Tests to measure the amount of time it takes the coyote to die after biting into the collar yielded results from 2½ to 7½ hours, with an average of 4 hours and 20 minutes.

And scavenger feeding—a major concern of 1080 opponents—does not appear to be a problem. "In pen tests that reasonably approximated field conditions, scavengers never ate the poison," Connolly says. "Remember, once the sheep has been killed and left by the predator, scavengers feed on the rest of the carcass," Connolly says.

In both pen and field tests, scavengers appeared to ignore the collar. "They definitely were not attracted to it," Connolly says. An attacking coyote is not attracted to the collar either, but punctures it simply because it is in the location where the coyote normally bites, he adds.

Connolly estimates that perhaps 10 percent of all U.S. sheep producers have problems that are severe enough to warrant the use of collars. (These 10 percent produce about 60 percent of the sheep population, Lawler adds.) "Coyotes would have to be killing at least once a week in the same pasture to make the collar technique useable," Connolly says. If predator problems are infrequent, ranchers will have little success in getting coyotes to attack collared sheep. And collars are, after all, not cheap at about $17 each.

Connolly points out one other possible cost for the producer. The method literally requires a sacrificial lamb. Collar or no collar, sheep attacked by coyotes rarely survive. Losing one collared animal, however, may be better than letting the coyote kill again, again, and again. □

[Based on information provided by economist John Lawler of the National Economics Division, Economic Research Service; and wildlife biologist Guy Connolly of the U.S. Fish and Wildlife Service.]

Focus on Food Spending

What foods do urban Americans buy during a typical week and how much do they spend per person on each product?

How does spending on different products vary from season to season and from one part of the country to another? How does it vary by size of household, income, race, age, and number of wage earners in the household?

Answers to these questions, and many others, can be found in this statistical bulletin. It draws on the Continuing Consumer Expenditure Survey which provides, according to the authors of this report, "the most recent and comprehensive data available on food spending by Americans."

Data tables in this bulletin separate food into 133 different categories. Beef, for example, is broken down into ground beef, chuck roast, round roast, other roast, round steak, sirloin, other steak, and other beef.

Survey data are presented for 1980 and 1981. Tables show average weekly spending per person on individual food items, as well as the percentage of households purchasing those items in a survey week. Here are a few general findings:

- Average weekly food expenditures per person rose from $18.95 in 1980 to $20.03 in 1981. Of the 1981 figure, $13.53 per person was spent for food at home and $6.50 was spent for food away from home.
- Single persons purchased a smaller variety of food products than households of two or more, but singles spent more on both food and alcoholic beverages, per person, than larger households. They were also the big spenders on eating out.

Food Spending in American Households, 1980-81 *by David Smallwood and James Blaylock. (Published July 1985; 133 pages, mostly data tables; GPO Stock No. 001-019-00410-0; $5.00.)*

Tracking Farmland Values

Farm real estate values dropped 19 percent in the last 4 years. In Nebraska, Iowa, Illinois, Indiana, and Ohio, values slumped more than 40 percent.

In April 1985, the average value of U.S. farm real estate, estimated at $679 per acre, was at its lowest level since 1979. Iowa's average value was down to $1,064 per acre, its lowest since 1976. In the rest of the Midwest, too, much of the appreciation in land values since the mid-1970's was wiped out.

Although values have been on a downward trend nationally for the last 3 or 4 years, it is not yet clear when the bottom will be reached. On average, farm real estate showed a 12-percent loss in value between April 1984 and April 1985, the sharpest 1-year decline since the early 1930's. From 1983 to 1984, values slipped only 1 percent.

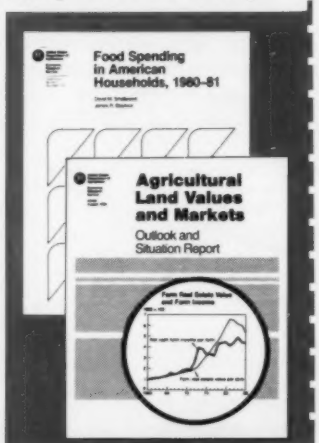
The drop in land values has been a major cause of the financial distress in farming, according to Economic Research Service analysts. "Farmers who purchased land in the late 1970's with low down payments and high interest rates have seen their equity shrink and, in some cases, disappear altogether," they write.

Also hurt are farm-related businesses, agricultural banks, and the Farm Credit system.

Analysts do not expect a rapid turnaround. They say that most of the forces leading to the fall in land values are still present, and that further erosion in values will probably occur if more farms are foreclosed and put on the market. They add, however, that buyer confidence will eventually re-emerge.

"As values decline, a point will be reached where prospective buyers believe they can pay for additional land from the income it will generate, and they will become active in the market," say the economists.

Agricultural Land Values and Markets *by William Heneberry and others. (Published August 1985; 26 pages of text, charts, and extensive farm real estate data tables; GPO Stock Number 001-019-00406-1; $1.00.)*



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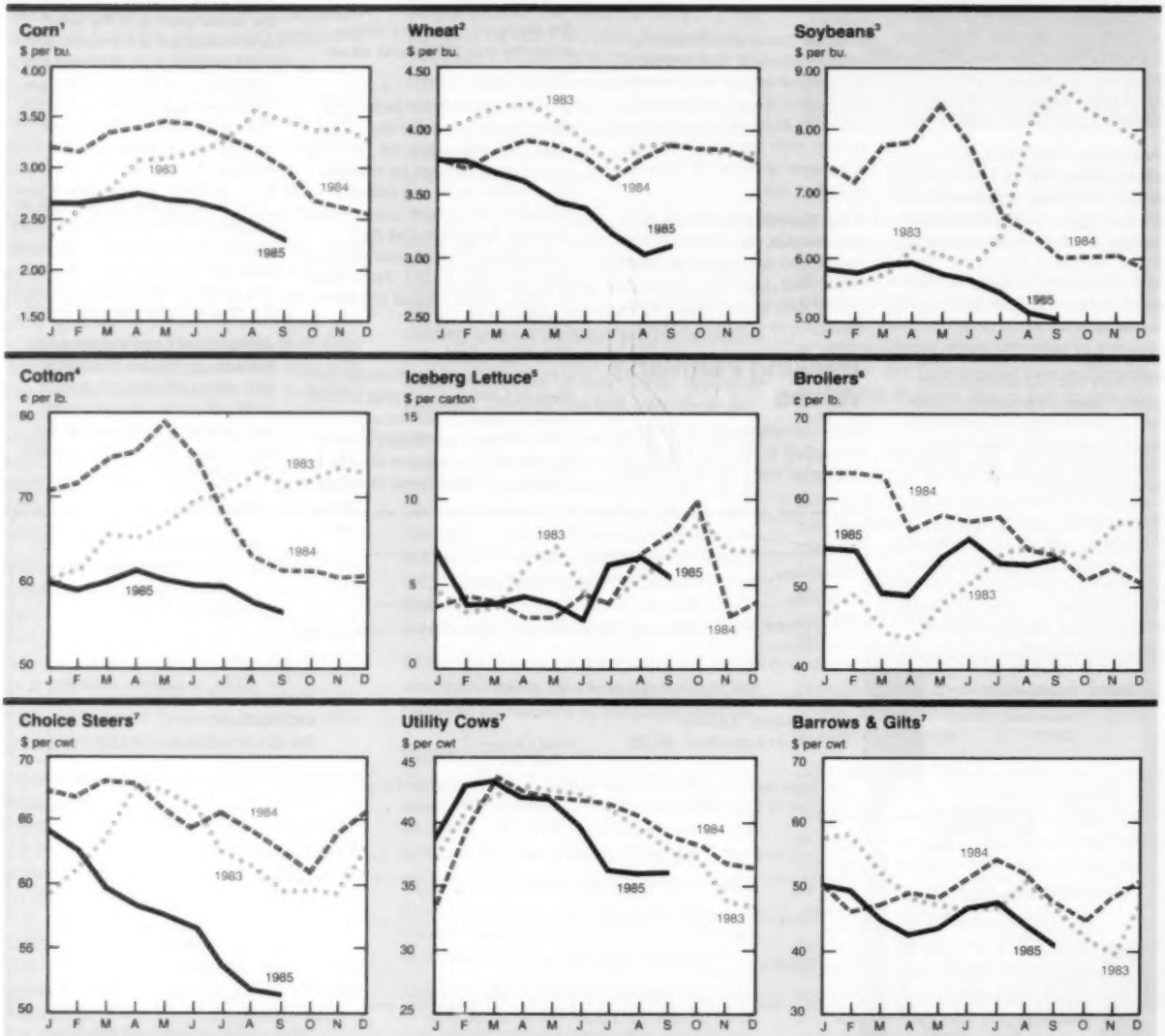
FARMLINE TRENDS

Monthly Price Monitor

USDA's September index of farm prices declined 0.8% from August and was 13% below its year-earlier level. Corn prices dropped to $2.28, the lowest since December 1982. Wheat prices held just above $3, and soybeans slipped to just above $5. Cotton prices continued downward, hitting 56.4¢ a pound, the lowest since December 1981. In the meat animals area, broilers gained slightly, while choice steer prices remained in the $51-$52 range, more than $10 below year-ago levels. Utility cow prices took a small, upward turn, but barrows and gilts lost over $3 per cwt, dropping below $41 for the first time since November 1983.

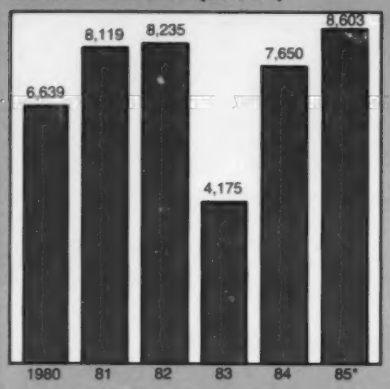


[1]No. 2 yellow, Central Illinois. [2]No. 1 HRW, Kansas City. [3]No. 1 yellow, Central Illinois. [4]SLM 1 1/16" spot market price. [5]Standard carton 24's, California-Arizona. [6]Wholesale, New York. [7]Omaha.

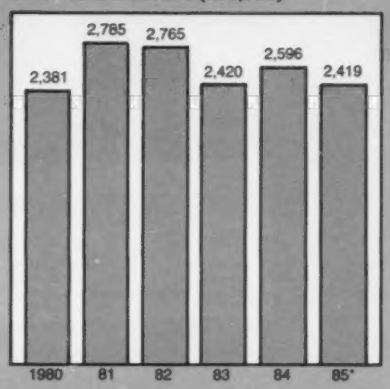
A Preliminary Look at This Year's Harvest

This Year's Corn Harvest Will Set a Record

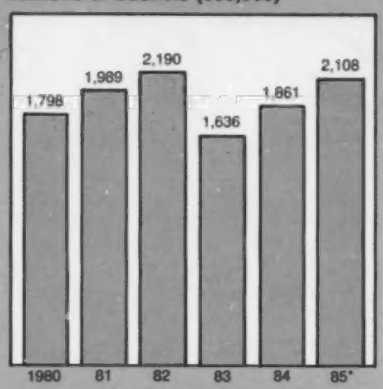
U.S. corn production in millions of bushels (000,000)



U.S. wheat production in millions of bushels (000,000)

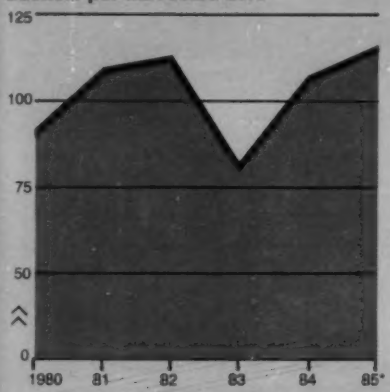


U.S. soybean production in millions of bushels (000,000)

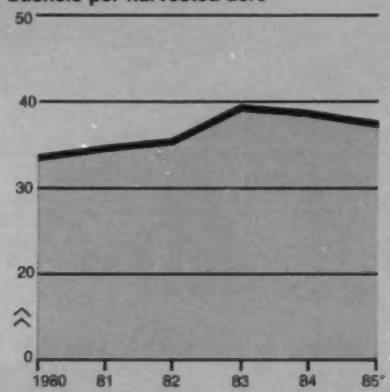


Record Yields Are Expected for Both Corn and Soybeans

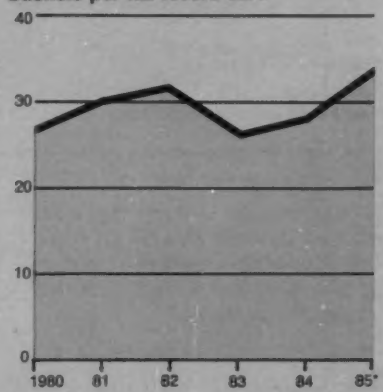
Corn yields in bushels per harvested acre



Wheat yields in bushels per harvested acre

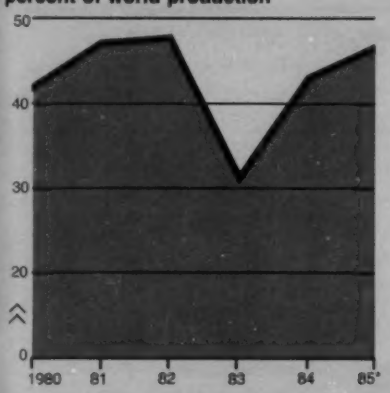


Soybean yields in bushels per harvested acre

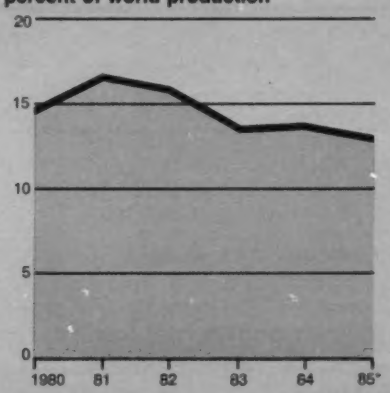


The U.S. Share of World Corn and Soybean Production Is Expected To Rise

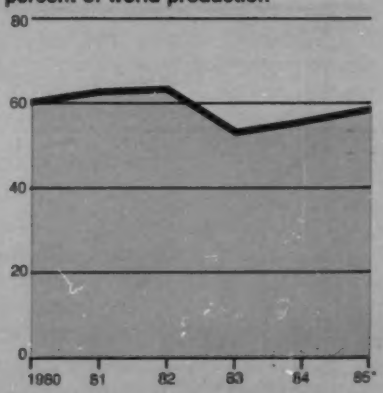
U.S. corn production as a percent of world production



U.S. wheat production as a percent of world production



U.S. soybean production as a percent of world production



*1985 figures are based on USDA's mid-October projections.

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